

## PUBLICATIONS

### **Journals:**

1. P. K. Sekhar, J. Zhou, M. B. Post, L. Woo, W. J. Buttner, W. R. Penrose, R. Mukundan, C. R Kreller, R. S Glass, F. H Garzon, and E. L Brosha, "Independent testing and validation of prototype hydrogen sensors," *International Journal of Hydrogen Energy*, V39(9), 4657-4663, (2014).
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3. P. K Sekhar, R. Mukundan, E. L. Brosha and F. H.Garzon, "Effect of perovskite electrode composition on mixed potential response", *Sensors and Actuators B*, V 183, 20-24 (2013).
4. P. K. Sekhar, H. Sarraf, H. Mekonen, R. Mukundan, E. L. Brosha, and F. H. Garzon, "Impedance spectroscopy based characterization of an electrochemical propylene sensor", *Sensor and Actuators B*, V177, 111-115 (2013).
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9. P. K. Sekhar, E. L. Brosha, R. Mukundan, M. A. Nelson, W. Li, P. Palanisamy, and F. H. Garzon, "Application of Commercial Automotive Sensor Manufacturing Methods for NO<sub>x</sub>/NH<sub>3</sub> Mixed Potential Sensors for On-board Emissions Control", *Sensors and Actuators B*, V144 (1), 112-119 (2010).
10. E. L. Brosha, R. Mukundan, F. H. Garzon, "YSZ-based mixed potential sensors for the detection of explosives", *Electrochemical and Solid-State Letters*, 11(12), J92-J95 (2008).
11. R. Mukundan, K. Teranishi, E. L. Brosha, and F. H. Garzon, "Nitrogen oxide sensors based on Yttria-stabilized zirconia electrolyte and oxide electrodes". *Electrochemical and Solid-State Letters*, 10(2), J26-J29 (2007).
12. E. L. Brosha, R. Mukundan, R. Lujan, and F. H. Garzon, "Mixed potential NO<sub>x</sub> sensors using thin film electrodes and electrolytes for stationary reciprocating engine type applications". *Sensors and Actuators B*, 119(2), 398-408 (2006).
13. R. Mukundan, E. L. Brosha, and F. H. Garzon, "A Low Temperature Sensor for the Detection of Carbon Monoxide in Hydrogen". *Solid State Ionics*, 175(1-4), 497-501 (2004).
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15. R. Mukundan, and F. H. Garzon, Electrochemical Sensors for Energy and Transportation, *Interface*, V 13 (2), 30-35. The Electrochemical Society, Summer (2004).
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## **Proceedings:**

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3. C. R. Kreller, P. K. Sekhar, D. Spernjak, W. Li, P. Palanisamy E. L. Brosha, R. Mukundan and F. H. Garzon, "Impedance as a diagnostic tool to characterize mixed-potential sensor response", *ECS Trans.*, 58(22), 21-30 (2014).
4. C. R. Kreller, P. K. Sekhar, W. Li, P. Palanisamy, E. L. Brosha, R. Mukundan and F. H. Garzon, "Application of Commercial Manufacturing Methods to Mixed-Potential NO<sub>x</sub> Sensors", *ECS Trans.*, 50(12), 307-314 (2013).
5. L. Y. Woo, R. S. Glass, E. L. Brosha, R. Mukundan, F. H. GArzon, W. J. Buttner, M. B. Post, C. Rivkin, and R. Burgess, "Humidity Tolerance of Electrochemical Hydrogen Safety Sensors Based on Yttria-Stabilized Zirconia (YSZ) and Tin-doped Indium Oxide (ITO)", *ECS Trans.*, 45(16), 19-31 (2013).
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12. E.L. Brosha, R. Mukundan, R. Lujan, F.H. Garzon, F.H., L. Woo, R. Glass. "Development of a zirconia-based electrochemical sensor for the detection of hydrogen in air", *ECS Trans.*, 16(11), 265-274 (2008).
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### **Patents:**

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